

CLAIMS

5 1. A method for recording message activity in a log, the method comprising the steps of:

receiving a request from an application to put a message, comprising message data, to a queue; and

10 detecting whether there is a previous occurrence of the message data in the log, and if there is not a previous occurrence writing a log record including the message data, but if there is a previous occurrence writing a log record including a reference for locating the previous occurrence of the message data in the log.

15 2. A method as claimed in claim 1 wherein the request to put a message includes an indication that the message data was put to a message queue or got from a message queue in a previous request from the application.

20 3. A method as claimed in claim 2 wherein the indication is a value which indicates that the message data was involved in the immediately preceding request from the application.

25 4. A method as claimed in claim 2 wherein the indication is a token which uniquely identifies the message data within the scope of the application.

5. A method as claimed in claim 1 further comprising the steps:

5 receiving a request from the application to get a message, comprising message data, from a queue; and

10 storing a reference, separate from the log and associated with the application, for locating a previous occurrence of the message data in the log.

15 6. A method as claimed in claim 1 wherein if the detecting step detects that there is not a previous occurrence of the message data in the log it further stores a reference, separate from the log and associated with the message, for subsequently locating the message data in the log.

20 7. A method for detecting the re-use of message data comprising the steps:

receiving a request from an application to put a message, comprising message data, to a queue; and

25 detecting, based on an indicator included with the request, that the message data was previously put to a message queue or got from a message queue by the application.

30 8. A method as claimed in claim 7 wherein the indicator is a value which indicates that the message data was

involved in the immediately preceding request from the application.

9. A method as claimed in claim 7 wherein the indicator
5 is a token which uniquely identifies the message data
within the scope of the application.

10. A computer program product, recorded on a medium,
comprising instructions which, when executed on a data
processing host, causes said host to carry out a method
comprising the steps:

15 receiving a request from an application to put a
message, comprising message data, to a queue; and

20 detecting whether there is a previous occurrence of
the message data in the log, and if there is not a
previous occurrence writing a log record including the
message data, but if there is a previous occurrence
writing a log record including a reference for locating
the previous occurrence of the message data in the log.

25 11. A computer program product as claimed in claim 10
wherein the request to put a message includes an
indication that the message data was put to a message
queue or got from a message queue in a previous request
from the application.

30 12. A computer program product as claimed in claim 11
wherein the indication is a value which indicates that

the message data was involved in the immediately preceding request from the application.

13. A computer program product as claimed in claim 11
5 wherein the indication is a token which uniquely identifies the message data within the scope of the application.

10 14. A computer program product as claimed in claim 10 further comprising the steps:

receiving a request from the application to get a message, comprising message data, from a queue; and

20 storing a reference, separate from the log and associated with the application, for locating a previous occurrence of the message data in the log.

25 15. A computer program product as claimed in claim 10 wherein if the detecting step detects that there is not a previous occurrence of the message data in the log it further stores a reference, separate from the log and associated with the message, for subsequently locating the message data in the log.

30 16. A computer program product, recorded on a medium, comprising instructions which, when executed on a data processing host, causes said host to carry out a method comprising the steps:

receiving a request from an application to put a message, comprising message data, to a queue; and

detecting, based on an indicator included with the request, that the message data was previously put to a message queue or got from a message queue by the application.

17. A computer program product as claimed in claim 16 wherein the indicator is a value which indicates that the message data was involved in the immediately preceding request from the application.

18. A computer program product as claimed in claim 16 wherein the indicator is a token which uniquely identifies the message data within the scope of the application.

19. A data processing apparatus comprising:

20 a non-volatile memory storage device for storing log records thereon in a log comprising one or more log files;

25 a volatile memory storage device;

means for receiving a request from an application to put a message, comprising message data, to a queue;

means for detecting whether there is a previous occurrence of the message data in the log;

5 means responsive to failing to detect a previous occurrence of the data in the log for writing a log record including the message data; and

10 means responsive to detecting a previous occurrence of the data in the log for writing a log record including a reference for locating the previous occurrence of the message data in the log.

15 20. An apparatus as claimed in claim 19 wherein the request to put a message includes an indication that the message data was put to a message queue or got from a message queue in a previous request from the application.

20 21. An apparatus as claimed in claim 20 wherein the indication is a value which indicates that the message data was involved in the immediately preceding request from the application.

25 22. An apparatus as claimed in claim 21 wherein the indication is a token which uniquely identifies the message data within the scope of the application.

23. An apparatus as claimed in claim 19 further comprising:

means for receiving a request from the application to get a message from the queue; and

5 means for storing a reference, separate from the log and associated with the application, for locating a previous occurrence of the message data in the log.

24. An apparatus as claimed in claim 19 further comprising:

10 means responsive to failing to detect a previous occurrence of the message data in the log for storing a reference, separate from the log and associated with the message, for subsequently locating the message data in the log.

25. A data processing apparatus comprising:

20 means for receiving a request from an application to put a message, comprising message data, to a queue; and

25 means for deducing, based on an indicator included with the request, that the message data was previously put to a message queue or got from a message queue by the application.

30 26. A data processing apparatus as claimed in claim 25 wherein the indicator is a value which indicates that the message data was involved in the immediately preceding request from the application.

27. A data processing apparatus as claimed in of claim
25 wherein the indicator is a token which uniquely
identifies the message data within the scope of the
application.